Diffusion of traditional and new media tactics in crisis communication

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Abstract
The Internet is emerging as an important tool for organizations to communicate with journalists and publics. This article reports the results of a five point-in-time study of organizational use of the Internet in crisis communication. Through the lens of Rogers [Rogers, E. (1962/1995). Diffusion of innovations. New York: Free Press] diffusion of innovations research, the data suggest that about half of the organizations experiencing a national crisis are integrating the Internet into their response. To illustrate this diffusion, the article provides exemplars of innovative Internet response during crisis.

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1. Introduction
For both journalists and public relations practitioners the need for timely, accurate, and effective communication is an imperative. The innovation of online communication is fast becoming an important strategy in any organization’s plan (Esrock & Leichty, 1998, 1999; Perry, Taylor, & Doerfel, 2003; Springston, 2001). Online communication is an innovation that is diffusing to various types and sizes of organizations. It will influence how organizations will communicate with the media and publics. Rogers (1962, 1995) identified diffusion as “the process by which an innovation is communicated through certain channels overtime among the members of a social system” (1995, p. 5). The diffusion literature spans

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over four decades and Rogers has modified the theory over the years. In his early work, he viewed diffusion as a linear process. However, later research found that diffusion is more than convergence in communication. People “personalize” innovations and use them in different ways than were originally planned by the innovation’s creators. This creates all sorts of unanticipated consequences, both positive and negative, for the innovation. And, perhaps more importantly for this study, diffusion decisions are not as simple as “accept” or “reject” of an innovation. Rather, in diffusion theory the rate of adoption follows an S-shaped curve. Diffusion of any change initially occurs slowly and then at some point, the diffusion begins to accelerate. “Innovations that are perceived by individuals as possessing greater relative advantage, compatibility, and the like, have a more rapid rate of adoption” (Rogers, 1995, p. 23). Thus, over time, if an innovation is considered by members of a social system to be useful, it will be adopted.

The purpose of this article is to examine how organizations are adopting the Internet into crisis response. To provide a context about the Internet as an innovational tool for media relations, the first section of this article reviews the literature addressing the Internet’s contributions to media relations and its potential for crisis communication. The second section provides the rationale and results of a five point-in-time study of how organizations actually adopted the Internet into their crisis communication. The final section discusses specific exemplars of innovative Internet use during crisis and it examines how new, mediated communication tactics may influence media relations.

2. Mediating organization–public relationships

The innovations of the WWW and the Internet appear to be diffusing across organizations and newsrooms at varying rates and at different levels. For instance, Porter, Sallot, Cameron, and Shamp (2001) reported that almost one third of journalists prefer to receive news releases via e-mail. Springston (2001) found that public relations practitioners have both positive and negative attitudes about the Internet in media relations. The WWW can support strategic communication efforts, inform, seek opinions and positions from relevant publics, and most importantly for this article, serve as a crisis communication tool. Through research and environmental scanning, organizations attempt to prevent and minimize crisis (Fink, 1986; Heath, 1998). Crisis is always a difficult time for organizations. However, Weick (1995) has a slightly different perspective on crisis. Weick viewed crisis as merely one phase in an organization’s lifecycle. According to Weick, the problem for organizations is not in the crisis itself, but in how the organization responds. Research suggests that communication during and after a crisis is one of the most important factors in determining the long-term effects of a crisis (Coombs, 1999). Organizations need to be prepared in advance with ways to adopt the Internet into their crisis communication (Perry et al., 2003).

Rogers (1995) noted that diffusion patterns reflect values within a system. Thus, some industries such as high tech firms may be more likely to adopt the Internet into their crisis response than others. However, in a 2003 study Perry et al. did not find any evidence that organizational type influences adoption levels. This current study seeks to revisit the question whether organizational type influences Internet use during a crisis. The Internet in crisis communication can provide both one- and two-way tools to all organizational types for communicating with the media and public. Murphy (1991) explored game theory, mixed motive approaches to public relations, and the relationships to symmetrical communication. Organizations can employ a mixed motive response (Murphy, 1991) to their strategic communication and crisis communication. Organizations often combine both one- and two-way communication strategies to maximize outcomes. We know that the use of the Internet is evolving as a corporate communication tool.
but little is known about the actual use of the Internet in crisis. Thus, the goal of this study was to collect baseline data about Internet usage during different types of crisis and to trace the diffusion of certain tactics overtime. The following research question and hypotheses inquire into diffusion of the Internet as a crisis communication innovation.

RQ 1: Are organizations using the Internet in their response to crisis? If yes, what types of communication tactics are organizations using in their mediated crisis response?

H1: Organizations will employ a mixed motive approach using traditional and new media communication tactics.

H2: Overtime, the diffusion rate of the Internet in crisis response will increase.

H3: Overtime, the diffusion rate of new media tactics in crisis response will increase.

H4: Technology organizations will have higher adoption rates than non-technology organizations.

To answer the research question and test the hypotheses, a longitudinal study was designed, pilot tested, and evaluated. The methodology of the study is explained below.

3. Methodology

To identify diffusion patterns, a pilot study collected data during October 1998. A follow-up study was conducted during October 1999. To minimize potential crisis effects unique to the month of October, a third study was conducted six months later in April 2000. The diffusion of an innovation can take years so the researchers conducted two additional studies in April 2003 and October 2003 to create a five-time database of organizational crises. The five 30-day timeframes allowed for examination of change overtime in organizational use of the Internet during crisis.

The sample of crises was obtained by daily monitoring of CNN.com and MSNBC.com. The researchers reviewed the news summary pages that highlighted the top news stories. Once a crisis was identified from news summary pages, the full story was reviewed. The home pages of the organization in crisis and/or other relevant Web sites were then accessed to see what, if any, response to the crisis the organization posted over the Internet. A total of 92 crises were identified comprise the data set for this study. Organizational sites were visited throughout a 24-h period to detect initial crisis responses. This 24-h period most closely relates to the time that most news professionals would be visiting the site for information gathering.

In this study, three parameters delineated a crisis (Gonzalez-Herrero & Pratt, 1995). A crisis had to be a significant disruption to a business, social environment or an organization; it had to result in national news media coverage; and it needed to be a situation where the public needed information to make better decisions. Crises must have fallen within all three parameters to be included in this study. The organizations studied in this project were open to all sectors, private and public, but limited to those with a national presence.

Organizations that used the Internet to communicate during a crisis were further coded to explore how they used the Internet. Two categories described Internet crisis tactics. The first category of Internet response identified Traditional Tactics. This first category included all traditional and standard forms of one-way crisis communication such as transcripts of news conferences, press releases, fact sheets, Q & A sheets, and memos or letters that had been adopted for the Web. These are the tactics that most journalists are most familiar with in their coverage of crisis situations and they can be executed with or without the Internet.
The second coding category identified Innovative Media Tactics that incorporated the unique features associated with Internet communication. Five new interactive communication tactics were identified from the pilot study. New media communication tactics refer to the unique, engagement features of online communication. The five new media tactics included: (1) **Dialogic communication** when an organization encourages the visitor, whether a member of media or the general public, to respond to an issue via the Internet. (2) **Connecting links** allow organizations to directly connect journalists to other relevant Internet sites. Hot buttons offer additional information or resources to inform the media or public. (3) **Real-time monitoring** provides updated information to monitor a crisis hour-by-hour. (4) **Multi-media effects** offer images, taped or live video, high-resolution photography, and audio effects to the media. (5) **Online chat** offers organizations the opportunity to immediately involve what Grunig’s situational theory of publics call “high involvement” people in the situation. Scott’s $p_i$ was calculated to ensure methodological rigor that the new media categories were mutually exclusive and clear ($Scott’s \ p_i = .92$).

4. Results

4.1. Crisis communication tactics

RQ 1 asked if organizations were using the Internet in their response to crisis. Additionally, it sought to identify what types of communication tactics organizations are adopting into their mediated crisis response. The sample included 92 organizations in crisis. Fifty organizations used the Internet in their response. Table 1 shows that over 54% of the 92 organizations in the sample adopted the Internet into their crisis response.

Table 1 shows that 49 of 50 of the organizations (98%) that used the Internet in their crisis response incorporated at least one of the traditional media tactics into their crisis response. Moreover, 34% relied only on the traditional crisis tactics for communicating about the crisis. It appears that news releases are the most favored tactic for informing the media and the public about the crisis. Eighty percent of the organizations that responded to the crisis through the Internet posted a news release within the initial 24 h of media coverage. The second most popular response was the fact sheet. Approximately 30% integrated a fact sheet to provide background about the crisis. Letters to the public/shareholders were used less frequently with about 22% of the organizations selecting this traditional communication tactic. Question and answer formats and transcripts of news conferences appear rarely used in the first 24 h of crisis.

The Internet also offers organizations new ways of communicating with journalists and publics. The second half of Table 1 identifies the frequencies of the innovative media tactics that are unique to Internet communication. Thirty-three of the organizations (66%) integrated at least one of the new media tactics into their crisis response and one organization relied solely on these tactics to communicate during its crisis. The most popular new media tactics were connecting links (46%) and opportunities for two-way communication (44%). Audiovisual effects such as downloadable interviews or videos appeared on 34% of the Web sites that responded on the Internet about their crisis. Real-time monitoring (16%) was used in situations requiring up-to-the-minute information. Facilitating online chat was only used by one organization during the study.

H1 posited that organizations would enact a mixed motive approach by combining both traditional and new media communication tactics during crisis response. A majority of responding organizations, 32 out
Table 1

<table>
<thead>
<tr>
<th>Time Description</th>
<th>1 October 1998 (n=20)</th>
<th>2 October 1999 (n=16)</th>
<th>3 April 2000 (n=14)</th>
<th>4 April 2003 (n=25)</th>
<th>5 October 2003 (n=17)</th>
<th>Total (N=92)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adoption rate (%)</strong></td>
<td>60</td>
<td>88</td>
<td>43</td>
<td>64</td>
<td>24</td>
<td>54</td>
</tr>
<tr>
<td><strong>Traditional tactics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internet response</td>
<td>12</td>
<td>14</td>
<td>6</td>
<td>14</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>Used traditional tactics</td>
<td>12</td>
<td>14</td>
<td>5</td>
<td>14</td>
<td>4</td>
<td>49</td>
</tr>
<tr>
<td>Used ONLY traditional</td>
<td>7</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>17</td>
</tr>
<tr>
<td>News conference</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Press release</td>
<td>7</td>
<td>12</td>
<td>4</td>
<td>13</td>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>Fact sheet</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>15</td>
</tr>
<tr>
<td>Q &amp; A</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>Memo/letter</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td><strong>Adoption percentage</strong></td>
<td>100</td>
<td>100</td>
<td>83</td>
<td>100</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td><strong>Innovative tactics</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Internet response</td>
<td>12</td>
<td>14</td>
<td>6</td>
<td>14</td>
<td>4</td>
<td>50</td>
</tr>
<tr>
<td>Used new media vehicles</td>
<td>5</td>
<td>8</td>
<td>5</td>
<td>11</td>
<td>4</td>
<td>33</td>
</tr>
<tr>
<td>Used ONLY new media</td>
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<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Two-way</td>
<td>3</td>
<td>3</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td>22</td>
</tr>
<tr>
<td>Links</td>
<td>5</td>
<td>3</td>
<td>4</td>
<td>9</td>
<td>2</td>
<td>23</td>
</tr>
<tr>
<td>Audio/visual</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>17</td>
</tr>
<tr>
<td>Real-time</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>On line chat</td>
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<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Adoption percentage</strong></td>
<td>42</td>
<td>57</td>
<td>83</td>
<td>79</td>
<td>100</td>
<td>66</td>
</tr>
</tbody>
</table>

Crisis responses (N=50)

of 50, totaling 64%, have adopted a mixed motive approach to Internet usage in crisis response. H1 is supported.

4.2. Evidence of diffusion

H2 posited that overtime, the diffusion of the Internet into crisis responses would increase. Time 2 has the highest rate of adoption with 14 of the 16 organizations (88%) of the organizations in that sampling frame using their Internet site to communicate about the crisis. When Time 1 and Time 5 were compared they show a decrease in Internet response rates to crisis over the sampling period. It appears that organizations are not increasing their use of the Internet in crisis response overtime as hypothesized. H2 is rejected.

The diffusion of the Internet into crisis response is not increasing but the types of tactics might be changing over the 5-year period. H3 posited that overtime the use of new media tactics would increase as more and more organizations learned about their value for mediated crisis communication. Table 1 shows that while the number of organizations using the Internet over the five times of the study did not increase, the percentage of new media tactics used in the responses did increase. In Time 1 only 42% of the organizations adopted new media tactics into their crisis response. With the exception of a minute decrease in Time 4, the number of organizations adopting new tactics into their response grew from a low
of 42% to a high of 100% over the course of the study. Time 3 and Time 5 showed especially high rates of new media tactics with 83 and 100%, respectively. H3 is supported.

Does organizational type influence the decision to adopt the Internet in a crisis? Previous research by Perry et al. found that financial organizations, high tech firms, and consumers groups have the highest rates of adoption. H4 posited that high tech firms, by the nature of their business, would emerge in this study as the most frequent adopters. The authors used a chi-square to test this hypothesis and found no significant differences between those organizations that operate in the high tech sector and those that are consumer based or financial based. H4 is not supported. The next section reflects further on the findings and provides several exemplars that describe some innovative practices of Internet use during crisis.

5. Discussion

5.1. Dominance of traditional crisis tactics

Overwhelmingly, when organizations decide to integrate the Internet into their crisis response, they are adopting the traditional tactics. In total, 98% of the organizations that responded adopted at least one traditional media tactic while 34% of those that responded relied exclusively on the traditional media tactics for communicating about the crisis. There are two obvious benefits to these time-tested media relations tactics. First, frequent and consistent updating of Web page content allows for an evolving response to key issues. This practice can help an organization to frame and define the crisis to the media. Creating frames for understanding and offering explanatory definitions are both crucial to effective communication during a crisis (Coombs, 1999). When a chronic crisis is expected, the organization can effectively address the issue to key constituencies and minimize disruption once the crisis becomes a public concern.

A second benefit is that the traditional tactics offer control of information. Seeger, Sellnow, and Ulmer (2001) noted with irony that in crisis communication, a time of enormous uncertainty and surprise, “the media and other stakeholders demand an immediate, thorough and unqualified response from organizations. Anything less might be seen as stonewalling” (p. 160). The traditional tactics are valuable as one part of a strategic crisis response. However, organizations that want to maximize the use of the Internet during a crisis should consider the best ways to use these tactics. One drawback of the traditional tactics is that they offer the Internet visitor one-way, textual information about a crisis. While informative to the media, understanding about the crisis can be improved upon by the addition of innovative media tactics.

5.2. Innovative media potential

Over time, the use of new media tactics appears to be increasing. The data suggest that three of the five new media tactics—two-way communication, connecting links, and multimedia effects—show similar rates of adoption ranging from 34 to 46%. Organizations can create crisis-specific menu items that invite visitors to further respond to the issue by creating hot-buttons such as a “Cast Your Vote” or “What’s Your Opinion.” This gives the organization the additional opportunity to then address concerns or questions as they arise, either with a direct response to the individual or by posting a response to general visitors to its home page. This gives media representatives’ additional insight into public response to the crisis. Moreover, Heath (1998) pointed to the potential for Internet technology to allow for increased interactivity—public dialogue—between issue discussants, as well as access to audiences and publics, which are otherwise difficult or impossible to reach.
The media and general public will appreciate an organization’s willingness to incorporate links to other relevant Internet sites, particularly in times of crisis. Links provide easy access to additional important information. Connecting links may include links to Web pages that offer a differing point of view, thereby better informing publics of the full context of the crisis. This can be an effective strategy to not only offer the organization’s side of the story, but to also allow publics to easily compare the organization’s position with those of its critics. Third party endorsements have also been widely used as a means of building consensus. Creating links to news Web sites that have favorably covered an organization are also valuable.

Yet, with all of this potential, the adoption rate of Internet use during a crisis is not growing as expected. This finding is consistent with much of what Rogers (1962, 1995) has found in his research. Adoption is not as simple as a person or organization accepting or rejecting an innovation. We know that adoption patterns are not linear and complex factors influence the decision to adopt. In this longitudinal study, 90 of the 92 organizations that met the parameters of the study had established Internet sites for communication with publics and the media. The researchers had initially proceeded from the assumption that the adoption of the Internet in crisis communication was at the middle stages of the S-curve and that adoption rates would increase over the five points of the study. However, given the current research findings, perhaps the use of the Internet is leveling off and we are studying the end of the S-curve whereby organizations have embraced many aspects of the Internet in media relations but have yet to see the value of the Internet in crisis communication. The use of the Internet in crisis response may be a very situation specific such as lawsuits, natural disasters, or product recalls. Below are three exemplars of how organizations have incorporated new media tactics into these specific crisis responses.

5.3. Best practices in mediated crisis responses

High tech firms provide insight into using the Internet in their crisis communication. One of the most famous (infamous) high tech organizations, Microsoft, experienced a crisis during three times of this study. Microsoft’s battles with the Department of Justice culminated when the anti-trust trial began on October 13, 1999. Microsoft employed all five of the traditional tactics and four new media tactics depicted in this study, including press releases, fact sheets, Q & As, letters and memos, two-way communication, multimedia effects, real-time monitoring (updates daily or more throughout the trial), and connecting links to third party Web sites. Microsoft’s Web site presented its positions, reactions, and rebuttals in the form of press releases, fact sheets and legal documents. An archive of trial updates was available, as was a virtual library (called “Exhibits”) of various documents presented during the trial, and a chronology of events. Microsoft also attempted to establish a dialogue with its visitors, encouraging them to share their views with the organization by creating an icon labeled “What’s your opinion?” Spokespersons responded to these concerns in posted letters and articles. Visitors were encouraged to send an e-mail or letter to their Congressional representative in response to the lawsuit by clicking on the “How can I help” link (previously called “Speak up” in time period one).

Some crises pose immediate threats to the public and thus require up to the minute information. Hurricanes and national disasters are one such threat. The National Hurricane Center, The Caribbean Hurricane Page, and the National Weather Service all employ state-of-the-art technology to provide the public with warnings about hurricanes’ path, intensity, and devastation. Satellite video images are displayed on the Web and updated as frequently as every 60 s when necessary. The National Hurricane Center provides
links to forecasts and advisories, probabilities, graphics, updates and even discussions about hurricane systems. Real-time monitoring of a hurricane provided communities with vital information necessary to prepare for evacuation. The Caribbean Hurricane Page posts links to the most active or threatening hurricane(s) in the area on its main page. Also on its main page are links to local news correspondents, specifically for those living in the Caribbean islands. Reports and messages from local correspondents experiencing the hurricane are posted and continually updated.

On several occasions during the study, companies recalled their products due to manufacturing defects or potential health risks. Recalls by General Electric (dishwashers), Graco Baby Products (baby swings) and Fischer Price (Power Wheels vehicles for children) incorporated the interactive attributes of the Web during the recall processes. Announcements of the recalls in the news media made mention of the corporations’ Web sites for further information. Each organization’s home page was updated so that the announcement was clearly seen and accessible from the home page. In addition to posting a press release, these organizations set up links to items such as “frequently asked questions,” and “safety tips.”

These three organizations maximized the Internet’s potential. They offered online forms for merchandise refund or return and posted large photos of the products being recalled. A question and answer format was also included. These organizations demonstrated a proactive approach to recalling their products, and exemplify the paradigm shift from one-way communication—where a corporation “tells” the public what it chooses—to two-way interaction between the public and the organization where the public is given the opportunity to respond. The use of the new media tactics during these difficult times helps to rebuild consumer trust in the affected organization.

6. Conclusions

The diffusion of the Internet as a crisis communication tool is still evolving. While the results of the study show a promising future for interactive communication during crisis, there are some limitations to this research design. Time periods other than October and April may be helpful. Future studies should consider studying random weeks across a four or five-month period to better capture crises. Multiple factors play a role in the decision to integrate the Internet into crisis response. For various reasons, some organizations have decided not to integrate the Internet into their crisis response. For instance, during the study, Planned Parenthood clinics in three states received anthrax threats. Planned Parenthood’s national Web site did not respond to these threats. At the discretion of senior leadership, there may be valid and appropriate reasons for not responding to a crisis. These reasons may include legal restrictions, technological limitations, fear of copycat attacks, or the public relations department’s lack of control over Web site development. However, in future years, when an organization decides not to respond through the Internet during a crisis, no response online may become synonymous with “no comment.” The media, the public, and as Weick (1995) reminds us—the effectiveness of the organization—all benefit from open communication during crisis.

References


